

VIRGINIA MANUFACTURING DEVELOPMENT COMMISSION

Executive Summary of the 2014 Interim Activity and Work of the Virginia Manufacturing Development Commission

Pursuant to the powers and duties authorized under § 30-276 of the Code of Virginia, the Manufacturing Development Commission (the Commission) held four meetings during the 2014 interim. The Commission studied and examined (i) the environmental and economic benefits of using recycled material in manufacturing; (ii) workforce development in Virginia; (iii) the establishment of a permanent index to measure the health of Virginia's manufacturing industry; (iv) intellectual property and commercialization agreements of public institutions of higher education; (v) the energy outlook for manufacturing; and (vi) the projected health benefits of the proposed Clean Power Plan. Following is a summary of the Commission's findings and proposed legislation.

Environmental and Economic Benefits of Using Recycled Material

A major focus of the Commission in 2014 was examining the environmental and economic benefits of using recycled material in the manufacturing process. House Joint Resolution No. 28 and Senate Joint Resolution No. 75, passed during the 2014 Session of the General Assembly, directed the Commission to study the benefits of using recycled material in manufacturing. The Commission limited its study to the recycling of plastics, glass, and fibers.

The Commission heard presentations from recycling businesses and other interested persons that explained the benefits of using recycled materials in the manufacturing process. Benefits of using recycled material include litter mitigation, landfill diversion, reduced demand on natural resources, energy savings for manufacturers, capital investment in industrial recycling machinery and equipment, the creation of new jobs in the recycling industry, and additional revenues generated from state and local taxes and fees on recycling activities and recycling machinery and equipment.

Mr. Michael Benedetto, president of TFC Recycling, mentioned to the Commission that recycling includes recovering natural resources from the waste stream. Recycling also creates jobs: For every 10,000 tons of solid waste that are recycled, 10 recycling jobs or 75 materials reuse jobs can be created. TFC Recycling is a privately held and family-operated business with beginnings that trace back to 1897. It is one of the largest exporters of recyclable materials from the Mid-Atlantic states.

Mr. Mike Sullivan, director of New Product Development for Hilex Poly Co., LLC, spoke to the Commission on recycling of plastic bags. Hilex Poly collects plastic bags, cleans them, repelletizes the bags, and manufactures new plastic bags from the pellets.

Plastic bags are 100 percent recyclable and reusable, and nine out of 10 people reuse plastic bags. Mr. Sullivan concluded that recycling of plastic bags helps achieve smart sustainability, litter prevention, landfill diversion, and a robust recycling infrastructure.

Mr. Tim Lee, president of the Virginia Recycling Association, told the Commission that the mission of the Virginia Recycling Association is to promote recycling as an integral part of resource conservation and solid waste management. He indicated that recycling results in growing levels of waste diversion. Additional benefits of making products from recovered materials include saving energy and water, reducing air pollution, and decreasing demand on natural resources. Recycling also has economic benefits. Mr. Lee reported that the annual economic impact to Virginia from recycling is 7,800 jobs, \$433.9 million in wages, \$49.8 million in state and local taxes, and more than \$1.3 billion in economic activity.

Mr. Mike L. Locher, a partner with Dixon Hughes Goodman, turned the Commission's attention to Virginia's recyclable materials income tax credit under § 58.1-439.7 of the Code of Virginia. He recommended several changes to make the tax credit more attractive to recyclers. The Commission endorsed legislation making amendments to the tax credit, incorporating several of Mr. Locher's recommendations. The legislation for consideration by the 2015 General Assembly included the following proposed changes:

1. Extending the sunset date of the credit from January 1, 2015, to January 1, 2020;
2. Increasing the tax credit from 10 percent to 20 percent of the purchase price paid for machinery and equipment that is integral to recycling and used in facilities that manufacture, process, or compound goods from recyclable materials;
3. Providing that qualifying machinery and equipment must be used predominantly in or on the premises of manufacturing facilities or plant units. Current law requires qualifying machinery and equipment to be used exclusively in or on such manufacturing facilities or plant units;
4. Limiting the documentation necessary to validate the purchase price of qualifying machinery and equipment. Under this change, the taxpayer would be required to submit just receipts and invoices to validate the purchase price;
5. Providing that the tax credit cannot be denied based solely on an unrelated person's use of any goods or tangible personal property produced by the qualifying machinery and equipment;
6. Clarifying that no tax credit may be issued for machinery and equipment unless the machinery and equipment manufacture, process, compound, or produce tangible personal property from recyclable materials;

7. Requiring taxpayers to apply to the Department of Environmental Quality for the tax credit. This would change the administration of the tax credit from the Department of Taxation to the Department of Environmental Quality; and

8. Establishing for the first time a cap on the aggregate amount of credits that may be issued to all taxpayers in a fiscal year. The cap would be \$3 million each fiscal year, and each taxpayer with qualifying machinery and equipment would receive a prorated credit if credits are oversubscribed.

Delegate Daniel Marshall (HB 1554) and Senator Frank Wagner (SB 1205) introduced the legislation.

Workforce Development in Virginia

Ms. April Kees, legislative analyst for the Senate Finance Committee, updated the Commission on workforce development. On October 7, 2013, Virginia Commonwealth University published Mapping the Virginia Workforce System: A Status Report on Workforce Programs in the Commonwealth. The report was commissioned by the Virginia Workforce Council. Eight agencies and 24 federal and state funded career and technical education and workforce programs contributed to the report. The report identifies sources of funding and annual expenditures by category for Virginia's workforce programs and uses the data collected to create a database of comprehensive workforce program information.

In program year 2012, the 24 federal and state funded programs included in the report received \$218 million in federal funds, \$134 million in state funds, \$9 million in local funds, and \$2 million in other funds for a total of \$363 million. Ms. Kees stated that the 24 programs served 1,104,320 program participants, with an average cost per participant of \$328. Approximately one-half of workforce funding was targeted for individuals with significant barriers to employment. Ms. Kees mentioned that the \$134 million in state workforce funds was primarily dedicated to kindergarten through 12th grade career and technical education curriculums or as a required match for receipt of federal grants.

Craig Herndon, vice chancellor for Workforce Development at the Virginia Community College System, also spoke on workforce development issues. He pointed out that businesses of all sizes and across varying industries are having trouble finding qualified applicants for job vacancies, especially for science, technology, engineering, or mathematics (STEM) positions. Job vacancies have become harder to fill as the economy has rebounded from the Great Recession.

Mr. Herndon identified four challenges confronting the community college system in helping to develop a workforce with the skills needed by Virginia's manufacturing and technology businesses. The first challenge is that workers currently do not have access to information that identifies communities and regions where skilled workers are in

demand. Secondly, the community college system must continue to create interest in technical training. Thirdly, Mr. Herndon mentioned that making technical training affordable is a challenge. Lastly, the needs of Virginia's manufacturing and technology businesses are diverse and change constantly, which makes it a challenge to align technical education programs with these needs.

Mr. Herndon made several recommendations that would enhance technical education and workforce development in the Commonwealth. He suggested that workforce development can be enhanced by providing incentives to community colleges to offer at reduced prices short-term technical training and industry certification courses. Making financial aid available to individuals enrolled in short-term technical training and industry certification courses will enhance workforce development. Also, it is extremely important that Virginia workers have access to state-of-the-industry technology in order to meet the workforce needs of Virginia manufacturers and technology businesses.

The Commission endorsed a legislative proposal that would provide grants to persons earning workforce training credentials in high-demand areas. The target audience is individuals enrolled in dual-enrollment programs or not enrolled in high school. Eligible individuals must complete a noncredit workforce training program and earn the industry credential in a high-demand field. The proposed grant is up to \$1,000 for the cost of the training program, required textbooks, and examination fees. The noncredit workforce training program must be provided or sponsored by a Virginia community college, a participating private educational institution certified by the State Council of Higher Education for Virginia, or certain Virginia public regional education centers. The proposal requires the Board of Workforce Development to develop a list of high-demand fields and related credentials. Delegate Kathy Byron (HB 1677) and Senator Wagner (SB 1209) introduced the legislation.

The Commission also endorsed two amendments to the general appropriation act (Chapter 3 of the Acts of Assembly of 2014, Special Session I) aimed at investing in community college-sponsored workforce training and procuring machinery and equipment for community colleges to provide such training. The first budget amendment would appropriate \$2 million in additional general funds to the Virginia Community College System (VCCS) to be used to support high-need noncredit courses. The second budget amendment would allow VCCS to use its total \$2 million allocation from the Higher Education Equipment Trust Fund (HEETF) for equipment needs relating to workforce development. Currently, \$500,000 of the total \$2 million HEETF allocation to VCCS for equipment needs is reserved to pay grants to businesses making donations of machinery and equipment to Virginia community colleges (the Machinery and Equipment Donation Grant Program; Chapter 566 of the Acts of Assembly of 2013). Senator Wagner submitted the budget amendments for consideration by the General Assembly.

Permanent Index to Measure the Health of Virginia's Manufacturing Industry

The Commission also studied the feasibility and propriety of establishing a permanent numerical index to measure the health of Virginia's manufacturing industry. In looking at this question, the Commission heard testimony on Virginia Performs, an accountability system developed and maintained by the Council on Virginia's Future (the Council). Mr. Gerard Ward, deputy director of the Council, stated that Virginia Performs aligns state agency strategies with higher-level statewide goals, increases transparency and accountability, and provides a foundation for strategic thinking and performance-based planning and budgeting. Virginia Performs has developed a scorecard to measure the following macro subjects in Virginia: economy; education; health and family; public safety; natural resources; transportation; and government and citizens. Virginia Performs has established a unique goal for each macro subject and tracks whether the Commonwealth's performance relative to the goal is improving, maintaining, or worsening.

Virginia Performs also produces a workforce system report card that is designed to focus on the workforce metrics related to a specific industry. Virginia's manufacturing industry was the first industry selected for analysis using the workforce system report card. Metrics selected to assess Virginia's manufacturing industry are: dual enrollments in manufacturing, project-based competitive events, career and technical education, community college internship programs, state-registered apprentices, independent industry certifications, credentials and degrees, annual new hires, shared assets, and shared manufacturing curriculum programs.

As considerable progress has been made by the Council in developing a permanent index to measure the health of Virginia's manufacturing industry, no legislation was proposed relating to this topic. Manufacturers and other interested persons are expected to continue to work with the Council in developing an index to measure the health of Virginia's manufacturing industry.

Intellectual Property and Commercialization Agreements of Public Institutions of Higher Education

In 2014 the Commission was also interested in intellectual property and commercialization agreements entered into by businesses with Virginia public institutions of higher education. Mr. Michael Straightiff, managing director of U.Va. Innovation and executive director of U.Va. Licensing & Ventures Group, gave a presentation on University contracts and working relationships with businesses for the development and commercialization of intellectual property. Constraints on U.Va. in assisting in the development and commercialization of intellectual property include the University's nonprofit status and tax-exempt financed buildings, federal laws, and state laws. Mr. Straightiff stressed that a one-size-fits-all approach is not the best approach for structuring intellectual property agreements because industry partners are diverse and have different interests that must be taken into consideration in agreements for the

development of intellectual property. Mr. Straightiff mentioned that the General Assembly can help promote innovation in Virginia's economy by passing legislation that coordinates the development of intellectual property research and provides additional salary support.

Dr. Finis Southworth, chief technology officer of AREVA, Inc. (AREVA), also spoke about intellectual property agreements involving the business community and Virginia's public research schools. Dr. Southworth noted that AREVA is the number-one supplier of nuclear energy products and services in the United States and has an American workforce of 4,800 professionals, 1,800 of which are located in Lynchburg. Agreements with Virginia's public research schools to develop intellectual property provide that background intellectual property is protected to the owner. For foreground intellectual property, the starting position for the research schools is that they own it. Businesses, however, take the position that they own the foreground intellectual property if they sponsor the research. According to Dr. Southworth, the business view is usually accepted and a small technology fee may be paid to the research school.

Dr. Southworth indicated that flexibility in structuring agreements for the development of intellectual property will allow for the protection of a business' property interest and also benefits students involved in the research. He concluded by noting that AREVA is pleased with its working relationships with Virginia's public research schools and their flexibility in structuring intellectual property agreements.

The Commission has an interest in tracking the amount and degree of externally sponsored research undertaken by Virginia's public institutions of higher education. As a result, the Commission endorsed legislation that would require each Virginia public institution of higher education to annually report on (i) assignments of intellectual property to businesses with a physical presence in Virginia; (ii) the dollar value of externally sponsored research contributions received from businesses with a physical presence in Virginia; and (iii) the number and types of patents awarded to the institution developed from externally sponsored research provided from businesses with a physical presence in Virginia.

Delegate David Toscano (HB 1959) and Senator Wagner (SB 1206) introduced the legislation.

Energy Outlook for Manufacturing

Stable prices and a sustainable supply of electricity and natural gas are crucial for the economic health of Virginia's manufacturers. Mr. Bill Murray, managing director of Corporate Public Policy for Dominion, gave an overview of electricity and natural gas prices in Virginia. In the fall of 2014, Dominion charged businesses \$0.061 per kilowatt hour for electricity. This was the lowest rate for industrial customers in the top 10 states for business as ranked by Consumer News and Business Channel (CNBC). He also pointed out that Dominion's industrial electricity rate as of September 2014 was 12.9

percent below the Southeast Peer Group average rate, 30.7 percent below the national average for industrial electricity, and 39 percent below the East Coast average rate.

The Commission did not consider any legislation relating to energy prices in Virginia.

Projected Health Benefits of the Proposed Clean Power Plan

The Commission continues to monitor federal laws and regulations that could impact manufacturing. To this end, the Commission endorsed a resolution requesting the Department of Environmental Quality to study the projected health benefits of the proposed federal Clean Power Plan. The study resolution, among other things, calls for the Department to determine whether the projected health benefits under new Environmental Protection Agency (EPA) proposed rules for coal-fired plants would arise in the absence of the EPA proposal. Senator Wagner (SJ 273) introduced the study resolution.

Supporting Documents

Presentations and other supporting documents related to the Commission's work during the 2014 interim may be viewed or downloaded via the Commission's website: <http://dls.virginia.gov/commissions/mdc.htm?x=mtg>.